

one of ordinary skill in the art to modify the combination to include using computers in generating appliance as shown by Andreiko.

Applicants respectfully traverse the rejection. As the Office Action recognized, none of the art relating to polymeric shell appliances shows digitally generating the appliances. Andreiko does not show the claimed digitally generated appliances, each having a geometry selected to reposition the teeth from a first arrangement to a second arrangement, wherein the appliances comprise polymeric shells having cavities that move teeth. Andreiko's appliance corresponds to the bracket and wire system of Andrews so would, at best, suggest the digital design of wires and brackets.

Thus, the combination of references asserted in the Office Action nowhere teaches or suggests the digital design of the polymeric shell appliances, as required by all claims herein. Moreover, the combination of references fails to teach or suggest the desirability of the claimed combination treatments of the present invention, i.e. successive use of both wire and bracket tooth repositioning systems and removable appliance tooth positioning systems including pluralities of polymeric shells. None of the cited art remotely suggests this combination.

While the Examiner relies on Andrews '341 for teaching use of a "mouthpiece" after conventional wire and bracket orthodontic treatment, that mouthpiece is nothing more than a single tooth positioner for finishing the teeth after the wire and bracket system. The Examiner further relies on Bergersen to teach the use of a polymeric shell appliance in place of the mouthpiece of Andrews. Such reliance is not understood. Bergersen in fact teaches a generally conventional positioner which is really not much different than the mouthpiece described in Andrews.

In any event, Andrews '341, either alone or in combination with Bergersen '851, at best teaches using a finisher (possibly in the form of a polymeric shell) to achieve final tooth positioning after conventional wire and bracket tooth treatment. The Examiner then relies on the patent to Kurz to teach using "successive shells including intermediate appliances . . . in order to make use of known methods of moving teeth in series to obtain the desired results." Such reliance is misplaced.

The Kurz '178 patent specifically teaches that the "vibrating positioners" are to be used "without the use of any other orthodontic appliances." See, Col. 3, lines 38-39. Thus, the combination of Kurz with Andrews and/or Bergersen, as proposed by the Examiner, is specifically contraindicated by the teachings of Kurz itself.

As is well known to the Examiner, *prima facie* obviousness requires not only that the individual references being relied on teach the various limitations of the claim being rejected, but also that some motivation for the combination be found in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See, NPP § 2142. In the present instance, not only is the desired motivation absent from the cited references, one of the references specifically teaches against the combination being made by the Examiner. As Kurz specifically teaches that it is to be used without other orthodontic appliances, the combination with Andrews and/or Bergersen is contraindicated.

For all these reasons, it is believed that the rejection of claims 1-5 as being obvious over the various references is not well taken, and it is respectfully requested that the rejection be withdrawn.

Claims 12-31 and 33-38 were rejected as being obvious over the combination of Andrews in view of Bergersen and Kurz, generally for the reasons set forth above with respect to claims 1-5. Applicants respectfully traverse such rejections for the reasons set forth above in the present Remarks. In particular, the combination of Kurz with Andrews and/or Bergersen as proposed by the Examiner, is contrary to the requirements for establishing *prima facie* obviousness since Kurz specifically teaches against using the multiple appliance system described therein with other orthodontic appliances.

The rejection of claims 6-11 over the combination of Andrews and Kurz is again traversed since the combination proposed by the Examiner is contraindicated by the teachings of Kurz. Kurz specifically teaches against using the multiple appliance system described therein with any other orthodontic appliances. In view of that teaching, one skilled in the art would not find it obvious to substitute the single positioner of Andrews with the multiple appliance system of Kurz.